Appl. No. 10/643,697

Response to April 16, 2008 Final Office Action

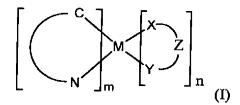
Page 2

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (currently amended): A compound represented by the Formula (I)



wherein



is a cyclometallated ligand,

M is a metal with an atomic weight of greater than 40,

X and Y are each independently <u>selected from pyrazoles</u>, <u>tetrazoles</u>, <u>thiazoles</u>, <u>furans and pyridines</u>,

a heteroatom selected from S, O, N, and P,

a heteroatom containing group selected from OR, SR, NR₂ and PR₂, wherein R is alkyl, aryl, or heteroaryl, and

a heterocycle, wherein the heterocycle is a 3-7 membered aromatic or non-aromatic ring containing at least one heteroatom selected from S, O, N, and P,

Z is a group of the formula JR'pR"q

wherein J is hydrogen or a metal or a non-metal, R' and R" are independently, alkenyl, heteroaryl, hydroxy, alkoxy, aryloxy, amino, alkylamino, arylamino, sulfido, alkylsulfido, arylsulfido, phophino, alkylphosphino or arylphosphino and p and q are integers between 0 and 2,

m and n are integers selected from 1 and 2 wherein the sum of n + m is 3,

with the proviso that Z is anionic.

Claim 2. (previously presented): The compound of claim 1, wherein J is boron.

Appl. No. 10/643,697

Response to April 16, 2008 Final Office Action

Page 3

Claim 3. (cancelled)

Claim 4. (cancelled)

Claim 5. (cancelled)

Claim 6. (currently amended): The compound of elaim 5 claim 1 wherein R' and R" are selected from the group consisting of alkyls, aryls, and pyrazoles and p and q are each 1.

Claim 7. (currently amended): The compound of claim 4 claim 6 wherein R' is pyrazole, R" is a pyrazole and p and q are each 1.

Claim 8. (currently amended): The compound of elaim 5 claim 1 wherein X and Y are pyrazoles.

Claim 9. (withdrawn -currently amended): The compound of elaim 5 claim 8, wherein Z is hydrogen.

Claim 10. (withdrawn): The compound of claim 1, wherein the heavy metal is selected from the group consisting of Ir, Pt, Pd, Rh, Re, Os, Tl, Pb, Bi, In, Sn, Sb, Te, Ag, and Au.

Claim 11. (withdrawn): The compound of claim 9 wherein the heavy metal is Ir.

Claim 12. (withdrawn): The compound of claim 9 wherein the heavy metal is Pt.

Claim 13. (previously presented): The compound of claim 1, having the Formula III:

$$\begin{bmatrix} C \\ N \end{bmatrix}_{m} \begin{bmatrix} (R^{11})_{\theta} \\ N - N \\ (R^{12})_{b} \end{bmatrix}_{n}$$

Appl. No. 10/643,697

Response to April 16, 2008 Final Office Action

Page 4

formula IV:

wherein each R¹¹ and R¹² is independently selected from alkyl, alkenyl, alkynyl, alkylaryl, CN, CF₃, CO₂R, C(O)R, NR₂, NO₂, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl or a heterocyclic group, and additionally, or alternatively, any two adjacent substituted positions together form, independently, a fused 5- to 6-member cyclic group, wherein said cyclic group is cycloalkyl, cycloheteroalkyl, aryl, or heteroaryl, and wherein the fused 5- to 6-member cyclic group cyclic group may be optionally substituted with one or more of alkyl, alkenyl, alkylaryl, CN, CF₃, CO₂R, C(O)R, NR₂, NO₂, OR, or halo; each R is independently alkyl, aryl, or heteroaryl; and subscript a and b are independently selected from 0, 1, 2, and 3.

Claim 14. (withdrawn-currently amended): The compound of elaim 5 claim 13, having the

IV.

Claim 15. (previously presented): The compound of claim 1, having the Formula V:

V

wherein each R¹¹, R¹², R¹³, and R¹⁴ is independently selected alkyl, alkenyl, alkynyl, alkylaryl, CN, CF₃, CO₂R, C(O)R, NR₂, NO₂, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl or a heterocyclic group, and additionally, or alternatively, any two adjacent substituted positions together form, independently, a fused 5- to 6-member cyclic group, wherein said cyclic group is cycloalkyl, cycloheteroalkyl, aryl, or heteroaryl, and wherein the fused 5- to 6-member cyclic group cyclic group may be optionally substituted with one or more of alkyl, alkenyl, alkylaryl, CN, CF₃, CO₂R, C(O)R, NR₂, NO₂, OR, or halo;

Appl. No. 10/643,697 Response to April 16, 2008 Final Office Action Page 5

each R is independently alkyl, aryl and heteroaryl; and subscript a, b, c, and d are independently selected from 0, 1, 2, and 3.

Claims 16-43. Cancelled.